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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/280,152	03/26/1999	WILLIAM D. GENTRY	SN0197CIP	5366
27820	7590	03/11/2004	EXAMINER	
WITHROW & TERRANOVA, P.L.L.C. P.O. BOX 1287 CARY, NC 27512			HARPER, KEVIN C	
			ART UNIT	PAPER NUMBER
			2666	
DATE MAILED: 03/11/2004 10				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/280,152	GENTRY ET AL.
	Examiner	Art Unit
	Kevin C. Harper	2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 07 November 2003.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-51 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-7,11-19,21-27,31-39 and 43-51 is/are rejected.
- 7) Claim(s) 8-10,20,28-30 and 40-42 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | Paper No(s)/Mail Date. _____.   |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____.                                   |

***Response to Arguments***

Applicant's arguments with respect to claims 1-51 have been considered but are moot in view of the new ground(s) of rejection. The indicated allowability of claims 2-7, 14-19, 22-27, 32, 34-39 and 44 is withdrawn in view of the newly discovered reference(s) to Baldwin et al. (US 5,953,339). Rejections based on the newly cited reference(s) follow.

***Claim Objections***

1. Claims 8, 20, 28 and 40 are objected to because "the serving switch" in lines 7 and 9 should be --the end office telephony switch--, or "the serving switch" in line 7 should be --a serving switch--. Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-7, 13-19, 21-27, 33-39, 45 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lu et al. (US 5,953,651) in view of Baldwin et al (US 5,729,536).

2. Regarding claims 1, 13, 21, 33, 45 and 47, Lu discloses a method of providing end office wireline telephony services to wireless subscribers (Figure 1; abstract, lines 1-4) such that the wireless call can utilize all of the wireline services associated with an end office telephony switching network (abstract, lines 13-22). However, Lu does not disclose mapping a subscriber's wireless telephony protocol to a packet data network protocol or managing the subscriber's wireless mobility services for a wireless call. Baldwin discloses an ATM network

for connecting cellular users (Figure 4) where the wireless telephony protocol is inherently mapped to a data packet network protocol (col. 5, lines 56-61) and the mobility of the wireless subscriber is managed (Figure 8, steps 620 and 625; col. 8 lines 14-20) whereby call origination or termination messages are transmitted to a control node of the ATM network (Figures 4-5, item 99; col. 5, lines 53-55). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have a packet network in the invention and manage the mobility of wireless subscribers in the packet network in the invention of Lu in order to interconnect a base station and a PSTN across large distances using a common and widely available backbone data network and to properly manage communications in the packet network among base stations performing handoff, respectively. Further regarding claim 33, the operations of Lu and Baldwin are inherently performed using computer programming.

3. Regarding claims 2-7, 14-19, 22-27 and 34-39, Lu does not disclose mapping a base station controller protocol to a call control protocol used by a packet network. Baldwin discloses inherently mapping a base station controller protocol (col. 5, lines 56-61) to a call control protocol utilized by the packet network (col. 5, lines 53-56), sending call origination messages to or call termination messages from a gateway device (Figure 5, items 130-140; col. 5, lines 53-56 and 61-63; col. 6, lines 33-37) providing access to an end office telephony switch (item 150), inherently mapping the call control protocol to the end office access protocol (col. 5, lines 50-53), originating a call using the end office access protocol (col. 5, lines 50-53 and 56-59; col. 7, lines 60-62) and routing the call between the end office telephony switch and a base station (col. 6, lines 32-37). A virtual speech path represents a virtual channel assigned temporarily to the call (col. 6, lines 32-37; Figure 8, step 635). Therefore, it would have been obvious to one

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skilled in the art at the time the invention was made to have a data network interconnect a base station and a PSTN in the invention of Lu in order to interconnect the base station and PSTN across large distances using a common and widely available backbone data network or to provide an inexpensive means to interconnect the base station and PSTN.

4. Regarding claims 46 and 48-51, Lu in view of Baldwin does not disclose using the various claimed standardized protocols. Examiner takes Official Notice that appropriate standardized protocols are used in a given network. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to use the IP protocol in the data network and IS-634 as the wireless protocol in the wireless network in the invention of Lu in view of Baldwin, or an H.323 protocol, a Session Initiation Protocol, or a Multi-Gateway Control Protocol (Media Gateway Control Protocol) as signaling protocols in the invention of Lu in view of Baldwin in order to achieve desired network operating characteristics and in order to have interoperability, availability or lower cost of network components using the standardized protocols.

Claims 11-12, 31-32 and 43-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lu in view of Baldwin, as applied to claim 1, 21 or 33 above, and further in view of Focarile (US 5,434,854).

5. Regarding claims 11, 31 and 43, Lu in view of Baldwin does not disclose simulcasting speech to a current base station and a target base station. Focarile discloses transmitting call information between a destination and two base stations (Figure 5, steps 510 and 540-560). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to simulcast call information to two base stations in the invention of Lu in view of Baldwin

in order to achieve seamless soft handover in a packet network (Focarile, Figure 1; col. 10, lines 7-12).

6. Regrinding claims 12, 32 and 44, Lu in view of Baldwin does not disclose simulcasting speech to a current base station and a target base station. Focarile discloses transmitting call information between a destination and two base stations (Figure 5, steps 510 and 540-560) based on signal strength messages in the cellular network (col. 9, lines 14-17) and handoff messages in the cellular network and packet network (col. 9, lines 31-47). The handoff is completed as necessary (col. 10, lines 2-5). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to simulcast call information to two base stations during handoff in the invention of Lu in view of Baldwin in order to achieve seamless soft handover in a packet network (Focarile, Figure 1; col. 10, lines 7-12).

***Allowable Subject Matter***

7. Claims 8-10, 20, 28-30 and 40-42 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Self et al. (US 5,495,484) discloses mobility management for wireless devices using base stations interconnected by a data network (Figure 3, Figure 4, item 12, and Figures 5-6).

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Harper whose telephone number is 703-305-0139. The examiner can normally be reached weekdays, except Wednesday, from 9:30 AM to 8:00 PM ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema S. Rao, can be reached at 703-308-5463. The fax number for Technology Center (TC) 2600 is 703-872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Customer Service Office for TC 2600 at 703-306-0377.

Kevin C. Harper



February 27, 2004



DANG TON  
PRIMARY EXAMINER